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ABSTRACT

The Washington Scholarship Fund Pilot Program (WSF) was established as a privately funded voucher program for low-income families in the District of Columbia. The WSF awarded its scholarships by lottery, making it possible to evaluate it as though it were a randomized experiment. The responses of qualified families with children in public schools are compared with those of families with children in private schools. Parental responses were from all applicants, and student responses were from students in grades 5 and 6. Private school samples ranged from 339 to 430 for different questions; public school samples ranged from 935 to 1,810. Students in private schools were more likely to report a positive educational climate in their schools, and parents echoed student opinions. Parental satisfaction was much higher for private schools, which demonstrated a greater capacity to stimulate parent participation and other forms of social capital among low-income, inner-city families. In applying for the program, parents were most interested in higher standards, a better curriculum, small classes, and improved safety. Although some findings could be influenced by parent self-selection through choosing to send their children to private schools, most findings held after statistical adjustments were made for demographic characteristics. An appendix describes parent characteristics. (Contains 9 tables and 25 endnotes.) (SLD)

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Education Policy and Governance

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A Joint Program of the
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and the
Center for American Political Studies

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September 1, 1998

Paper prepared under the auspices of the Program on Education Policy and Governance, Harvard University, for presentation before the annual meetings of the American Political Science Association, Boston MA, September, 1998.

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Initial Findings from an Evaluation of the School Choice Program in Washington, D. C.

(Executive Summary)

In the summer of 1998 President Bill Clinton vetoed congressional legislation that would have established a pilot school voucher program for low-income families in the District of Columbia. However, a similar privately-funded program, the Washington Scholarship Fund Pilot Program (WSF), was established in 1997 through the expansion of an already existing scholarship fund. WSF awarded scholarships by lottery, thereby making it possible to conduct an evaluation designed as a randomized experiment. This initial report compares the responses of qualified families with children currently in public schools with those of families with children in private schools. Parental responses are from all applicants; most student responses are from pupils in fifth and sixth grades.

Students in private schools are significantly more likely than students in public schools to report a positive educational climate in their school. Differences were as follows:

- Reporting "I do not feel safe at this school" -- 5 percent of private-school students as compared to 21 percent of public school students.
- "Strongly agree" that "teachers care about students" -- 72 percent of students in private schools as compared to 55 percent of public-school students.
- "Strongly agree" that "teaching here is good" -- 68 percent of private-school students as compared to 52 percent of public-school students.
- Reporting "a lot" of cheating at school -- 18 percent of private-school students as compared to 39 percent of public-school students.
- Strongly agree that "some teachers ignore" cheating -- 13 percent of private-school students as compared to 25 percent of public-school students.
- Satisfaction "with the way my education is going" -- 90 percent in private sector as compared to 75 percent in public sector.
- Encouraged "a lot" by teachers to study current events -- 47 percent of private-school students as compared to 37 percent of public-school students.
- "Strongly agree" that "student misbehavior makes it hard to learn" -- 19 percent in private sector as compared to 36 percent in public sector.
- Reporting "there are many gang members in school" -- 8 percent of private-school students as compared to 22 percent of public-school students.

Parents echo student reports. Parents from private schools are more likely to "strongly agree" with the following statements about their current school:

- School is safe;
- Teaching is good;
- Teachers help all the students;
- School listens to parents;
- Parents work together to support school;
- Rules for behavior are strict;
- School puts high priority on learning.

Differences between the responses of private and public school applicants ranged between 30 to 40 percentage points; they remain large even when statistical adjustments are made for the demographic characteristics of the two groups of parents.

Parental satisfaction with private schools was much higher than with public schools. Nearly 60 percent of private-school parents gave their school an "A," as compared to less than a fifth of public-school parents. This difference in the degree of satisfaction with public and private schools is evident when you ask about a wide variety of specific aspects of school life:

- When it comes to safety, for example, private school applicants are much the more satisfied group of parents.
- Two-thirds of the private-school parents, but only a quarter of the public-school parents, were "very satisfied" with school safety.
- Nearly two-thirds of the private-school parents, but less than one-fifth of the public-school parents, were "very satisfied" with their school's academic program.
- Two-thirds of the private-school parents were "very satisfied" with safety at the school, as compared to less than one-fourth of the parents of students still in public schools.

Private schools demonstrated a greater capacity to stimulate conversations, community participation and other forms of social capital among low-income, inner-city families. For example,

- Nearly a third of the parents of Washington's public-school applicants "seldom or never" discussed school affairs with other parents, as compared to only 17 percent of private-school parents.
- 74 percent of families of applicants from private schools, but only 63 percent of public-school applicants, said they felt part of their community, feeling it was more than just a place to live.

The applicant families with children in public schools said the most important reasons for applying for a private-school scholarship was to find a school with higher standards and a better curriculum. Parents also said they were interested in smaller class sizes and improved safety for their children. Least important was the school's location.

The WSF program reached a segment of the disadvantaged population not previously served by Washington's private schools. Over 85 percent of the applicants from both public and private schools were African American. Applicants from public schools consisted of mothers less likely to have a college education, parents who were less likely to be married, and families more dependent on government aid.

Established for the first time on a large scale in 1997, WSF offered lottery winners annual scholarships of up to $1,700 to help pay tuition at a private school for at least three years. Over 7,500 telephone applications were received between October 1997 and January 1998. In response to invitations sent by WSF, over 3,000 applicants attended verification sessions, where eligibility was determined, students were tested, older students filled out short questionnaires, and adult family members completed longer questionnaires while waiting for testing to be completed. The lottery selecting scholarship winners was held on April 29, 1998. WSF announced that it expected to award over one thousand scholarships, with a majority going to students not previously in a private school. The data reported in this paper are taken from responses from parents and students at these verification and testing sessions.

Inasmuch as these findings are based on information from public and private school parents prior to the beginning of the scholarship program, they could be due to the self-selection of parents who chose to send their children to private schools. However, most findings hold after statistical adjustments have been made for demographic characteristics.

The evaluation of these pilot programs is a joint activity of the Harvard Program on Education Policy and Governance and Northern Illinois University's Social Science Research Institute.

Initial Findings from an Evaluation of School Choice in Washington, D. C.

In the summer of 1998 President Bill Clinton vetoed congressional legislation that would have established a pilot school voucher program for low-income families in the District of Columbia. However, a similar privately-funded program, the Washington Scholarship Fund Pilot Program (WSF), was established in 1997 through the expansion of an already existing scholarship fund. WSF awarded scholarships by lottery, thereby making it possible to conduct an evaluation designed as a randomized experiment. Over one thousand scholarships were offered to over six thousand initial applicants from both public and private schools. The evaluation of the pilot programs is a joint activity of the Harvard Program on Education Policy and Governance and Northern Illinois University's Social Science Research Institute.[1]

The results of the randomized experiment will be reported annually over the next three years. Information concerning the impact of the program on student achievement and other education and social outcomes will be provided. At this point information is available from the baseline surveys administered to parents and older students in public and private schools in the spring of 1998 at the time family eligibility was verified.

The main findings reported in this paper are as follows:

- Students in public schools report that teachers are more likely to ignore cheating and are less likely to care about students. Students also report less school spirit. Private-school students are more likely to report that "teaching is good."

- Students in public schools are more likely to report that they do not feel safe in school. They report more destruction of property, gangs, racial conflict, cheating, and misbehavior that makes it hard to learn. They are less likely to say that they are satisfied with their education.

- Nearly 60 percent of private-school parents gave their school an "A," as compared to less than a fifth of public-school parents. Parents of students in private schools are much more satisfied with the school's academic quality and safety at the school. They are more likely to report that "teachers help all students" and that the "teaching is good."

- Private-schools seem to generate more "social capital." Parents of students from private schools were more engaged in their school and community.

- The WSF program reached a segment of the disadvantaged population not previously served by Washington's private schools. Over 85 percent of the applicants from both public and private schools were African American. Applicants from public schools came from families more dependent on government aid, mothers were less well educated, and parents were less likely to be married.

Washington Scholarship Fund Pilot Program

The WSF program was originally established in 1993. At that time, a limited number of scholarships were offered to students from low-income families which could be used at a private school of the family's choice. By the fall of 1997, WSF was serving approximately 460 children at 72 private schools. WSF then received a large infusion of new funds from two philanthropists, and a major expansion of the program was announced in October 1997. Both general news announcements and paid advertising were used to publicize the enlarged school-choice scholarship program. WSF announced that, in the event that applications exceeded scholarship resources, winners would be chosen by lottery.

WSF provided recipients with annual scholarships of up to $1,700 to help pay the costs of tuition at a private elementary school for at least three years. WSF has said that it will attempt to continue tuition support through completion of high school, if funds are available. No family whose income was more than two and a half times the poverty line was eligible for support. The maximum amount of tuition support is $2,200. Families with incomes at or below the poverty line were awarded scholarships that equaled 60 percent of tuition, up to the maximum amount. The size of the scholarship was less for families with income above the poverty line. Applicants also had to have been residents of Washington, D.C. and be entering grades K-8 in the fall of 1998.

Over 7,500 telephone applications were received between October 1997 and January 1998; in response to invitations sent by WSF, over 3,000 applicants attended verification and testing sessions. The lottery selecting scholarship winners was held on April 29, 1998. WSF announced that it expected to award over one thousand scholarships, with a majority of the scholarships going to students not previously in a private school.

Scholarship students could attend any private school in the Washington area to which they gained admission. WSF assisted scholarship students in finding private schools by providing lists of schools and making individual phone calls to families to ascertain their particular needs. WSF made extensive efforts during the summer months of 1998 to inform scholarship recipients of private school options in order to secure as many placements as possible. At this point, however, it is still unknown how many of the scholarship winners will be attending private schools during the 1998-99 academic year.

Evaluation Procedures

The procedures that are being used to evaluate the WSF pilot program conform to those used in randomized experiments. Baseline data were collected before the lottery was held; the lottery was performed by the evaluation team; and one of the conditions for participating in the program was agreement to provide confidential baseline and follow-up information.

During the sessions at which eligibility was verified, students in grades 1 through 8 were asked to take the Iowa Test in Basic Skills (ITBS) in reading and mathematics. Students in kindergarten applying for a scholarship for first grade were exempted from this requirement. Parents were asked to fill out questionnaires reporting their satisfaction with the school their children were currently attending, their involvement in their children's education, the community in which they live, and their demographic characteristics. These sessions took place on Saturday mornings in February, March, and April 1998. The sessions were held at private schools, where students could take tests in a classroom setting. In most cases, private school teachers and

administrators served as proctors under the overall supervision of the program sponsors and the evaluation team.

While the child was taking a test that took more than an hour, responses to questionnaires were completed in a separate room by the adult accompanying the child to the testing session. This procedure had the advantage of giving administrators the opportunity to stress that the responses to the questionnaire would not affect the awarding of a scholarship and that individual responses would be held in strict confidence and be used for statistical purposes only. It also provided respondents the time to complete the questionnaire at leisure and the opportunity to ask any questions concerning the meaning of particular questions.

Anticipating that a variety of caretakers might be accompanying children, questions were designed in such a way as to allow any caretaker familiar with the child's school experiences to respond to the questions. In over 90 percent of the cases, a parent accompanied the child and answered the questions. Inasmuch as most respondents were parents, the remainder of the report, for ease of presentation, refers to opinions expressed as those of parents.

The lottery worked as expected. As is shown in the Appendix to this paper, the demographic characteristics of scholarship recipients do not differ significantly from those of the families in the control group.

Demographic Characteristics of Applicants

An important issue in the school choice debate concerns the composition of those who would leave public schools, if school vouchers were made available generally. School choice critics have argued that vouchers will serve the better off. The president of the American Federation of Teachers (AFT), Sandra Feldman, has claimed that vouchers for private schools take "money away from inner city schools so a few selected children can get vouchers to attend private schools, while the majority of equally deserving kids, who remain in the public schools, are ignored."[2] Evaluations of school-choice scholarship programs in Cleveland and New York

City, however, indicate that private schools admit members of economically and socially disadvantaged groups.[3]

To ascertain how "select" school-choice applicants in Washington, D. C. actually were, eligible families were asked to provide information on a broad range of demographic characteristics. The characteristics of applicants from public and private schools were compared. The data indicate that the scholarship program proved attractive to segments of Washington's low-income population that had not previously been as well served by the city's private schools.

Most applicants were in younger grades. Nearly 40 percent of those applying for a scholarship were either in kindergarten or first grade. Only about 20 percent were in grades five and six. Less than one percent were in grades seven and eight. Students in grades five and above were given a survey; since the vast majority of those responding to the survey were in grades five and six, student responses reported in this paper should be interpreted in this light.

The families of applicants from private schools were considerably less dependent on various kinds of governmental assistance-food stamps, welfare, Medicaid and housing vouchers (Table 1). For example, less than 20 percent of the families of private-school applicants were receiving food stamps, as compared to 40 percent of those from public schools. Differences in employment were smaller. Forty-seven percent of the fathers of private-school applicants worked full-time, as compared to 42 percent of applicants from public-schools. For mothers, the percentages were 60 and 56 percent for the two groups, respectively.

Mothers and fathers of Washington's private-school applicants had more years of education. For example, about 40 percent of the mothers of applicants from private schools had at least two years of college, as compared to about one-fourth of the mothers of public-school applicants.

Both public-school and private-school applicants were overwhelmingly African American. Only 4 percent of the mothers of private-school applicants were white, as was just one percent of

mothers of applicants coming from public schools. The percentage black for the two groups was 86 percent and 95 percent, respectively. Ninety percent of applicants from both groups had parents born in the United States. On average, children living at home numbered 2.6 for the public school applicants, 2.1 for those from private schools.

As can also be seen in Table 1, nearly 60 percent of the families of qualified applicants from Washington's public schools were single mothers, as compared to about half of the families whose students still remained in private schools. Mothers were also slightly more likely to have lived in the same residence for more than two years, but the difference between the two groups was only 6 percentage points.

The religious identifications of the two groups were more differentiated. Nearly 30 percent of the mothers of private-school applicants, but only about 15 percent of the mothers of public-school applicants, were Catholic. Most of the remaining mothers were Protestant. Mothers of private-school applicants were also more likely to attend religious services at least once a week.

In sum, there is little evidence to support the contention that the WSF program selected out socially advantaged students from the Washington public schools. On the contrary, the applicants coming from public schools were from a more disadvantaged population than eligible applicants from private schools, an indication the program was reaching a segment of the D. C. population not previously served by the city's private schools. Parental and student reports on public and private schools discussed below have been adjusted statistically so as to take into account these demographic differences.[4]

Parental Involvement in Child's Education

When filling out questionnaires, many people under-report self-indulgent activities and over-report constructive ones. If people actually did what they say they do, less tobacco would be purchased and ice cream parlors would verge on bankruptcy. Conversely, polling booths would

be over-run on election day, religious services filled to capacity, and poetry books would rank among the nation's best sellers. So it is with parent's reports of involvement with their child's education. Time spent teaching and helping children is likely to be over-reported.[5] But there is no reason to think exaggeration was greater for one group of parents than the other.

When the two groups of parents are compared, no difference in their educational commitment can be detected. As shown in Table 2, similar percentages of the two groups of parents reported attending parent-teacher meetings, volunteering at school, and joining a PTA or similar group. (However, they reported differential attendance at school activities, as is discussed below).

Parental Reports of Student Educational Difficulties

Public- and private-school parents report significant differences in the educational characteristics of the child applying for a scholarship. As can be seen in Table 3, parents of applicants coming from public schools are more likely to report that their child received a "special award in school" but are also more likely to report that their child does not learn quickly, has behavior problems, is often bored in class, is selectively interested in subjects, does not have many friends, and does not do schoolwork enough.

It is not altogether clear whether these challenges reported by parents are a function of the child's own capacities or the qualities of the school the child is attending. However, the differences remain significant even after data had been adjusted for the demographic characteristics of the family.

Social Capital

In a well-known study of public and private schools, James Coleman and his colleagues developed the concept "social capital" to refer to the resources that are generated by the more or less accidental interaction among adults in a well-functioning community.[6] Coleman thought that Catholic schools were effective at least in part because Catholic parents met one another at

religious services, bingo parties, Knights of Columbus ceremonies, scouting events, and other community gatherings. Although these communal occasions had no ostensible educational content, the social capital generated by adult interaction had important, if indirect educational consequences. At these public gatherings, adults met the parents of their children's friends and acquaintances, and, as a result, parents together could monitor more easily their children's relationships with peers. Aware that their parents may learn what was happening, young people governed themselves accordingly. Anthony Bryk and his colleagues have shown that the process, deeply rooted in Catholic traditions, is subtle, implicit, but effective.[7]

Recently, Robert Putnam documented a serious decline in the nation's social capital. People participate less in community activities, group sports, and neighborhood picnics. TV watching, movie going, web-site searching and work-out sessions have substituted for bowling, Elks meetings, and ice-cream socials. The consequence, says Putnam, is a growing distrust of one another and a decline in the effectiveness of those governmental services dependent upon the mutual co-operation of citizens.[8] Inasmuch as schools and families must work closely together if children are to learn most efficaciously, the implications of Putnam's findings are particularly serious for the state of American education.

Not much is known, however, about the potential of public and private schooling for the formation of social capital--even Coleman's own study of public and private schools failed to provide direct information on the amount of social capital in the two educational sectors. Nor is it altogether clear whether social capital is generated more by private or public institutions. On the one hand, it is possible that neighborhood public schools stimulate conversations among parents who meet one another both at local school events, community meetings held in local school buildings, and in the course of daily shopping and neighborhood walks. Private schools that serve different groups within a community may fragment and isolate citizens from one another. This seems to be the position taken by Princeton theorist Amy Gutmann, who has argued that "public,

not private, schooling is . . . the primary means by which citizens can morally educate future citizens." [9]

All these considerations suggest that community engagement occurs more regularly among those who send their children to the same public school as their neighbors. And perhaps that was once the case in small-towns where public-schools were both educational organizations and institutions of community integration.

On the other hand, any such claims for public schools located in large, central cities have a quaint, romantic tinge. Many factors in today's big cities undermine the public schools' capacity to generate social capital. To maintain privacy and to guard against crime, public schools are not allowed to share lists of family names and addresses. Public school families in the inner city may attend school activities less often, in part because teacher union contracts often sharply limit the amount of time public schools are open to the public. Adult access to school buildings is limited by metal detectors, locked doors and stern warnings against engaging in suspicious behavior. Concerns about crime and violence make streets unsafe for unguarded neighborhood encounters. Also, many public-school children are bused to school outside their neighborhood in response to school-desegregation orders. In sum, potential violence, regulatory constraints, and contractual obligations, privately-controlled spaces and institutions may restrict community discourse and the formation of social capita in publicly-controlled settings.

Meanwhile, the private sector would seem to have some very specific advantages. The very fact that parents are choosing their child's school provides an incentive to search out other parents to learn more about what is happening in alternative educational settings.[10] Once a choice has been made, a sense of shared experience exists among those who have made a similar choice. Even those who choose somewhat distinctive cars, whether Suburu or Corvette, seem to develop a sense of community when spotting one another on the road.

Private schools give parents plenty of opportunities to contact one another. For one thing, it is easier for private schools to distribute lists of phone numbers and addresses, making it easier for parents to contact one another. Phone lists are readily justified by the private-school need to ask parents to call one another to enlist each other's participation in candy sales, newspaper drives or school auctions. Adults also may find it easier to wander in and out of private than public school buildings. One of the authors of this paper was recently startled when he, an arguably "suspicious-looking" single male, was allowed to hunt for the principal's office by wandering unhindered down the hallways of a private school in the heart of an inner city. It turned out the principal's "office" was in the hallway itself, a good place to keep an eye on everyone, he said.

Private schools cannot afford the elaborate bus services that transport public-school children. As a result, private-school families may need to talk to one another in order to arrange ride-sharing or work out safe, shared public transportation routes. Private-school families may also meet each other at religious services, bingo parties, and evening school events, more easily scheduled in private schools less burdened by union contracts. All of these situations provide parents with opportunities to talk with one another as well as with school employees.

To see whether private schools actually generate more social capital, parents were asked a number of questions about their relationships with other parents and with their community. Responses to these questions indicate that Coleman's hypothesis may well be correct. For one thing, applicant families with children already in private schools were more likely to attend school activities (see Table 4).

Also, parents of private-school applicants were much more likely to discuss school affairs with one another. As is shown in Table 5, nearly a third of the parents of Washington's public-school applicants "seldom or never" discussed school affairs with other parents, whereas only about 15 percent of private-school parents reported an equivalent paucity of such conversations. Finally, families of applicants from private schools were more likely to report that

they felt part of their community, saying it is more than just a place to live. Approximately three-fourths of the parents of private school applicants reported this feeling, as compared to two-thirds of public-school applicants. Private-school parents were also more likely to know the parents of their children's friends.

In sum, parental responses to questions about civic engagement indicate that more social capital may be formed within the private than the public educational sector. However, these findings are preliminary. At this point in our research we have information only from scholarship applicants at one point in time. It is possible that the causal relationship is the reverse of the one that has been inferred. Perhaps those families who are inclined to go to school events, talk about school affairs with other parents, and feel more a part of the community are the ones more likely to place their children in private schools. But we doubt causal relationships run in this direction. The statistical analysis has controlled for differences in demographic characteristics. Although some unobserved differences between the two groups of parents could explain the higher level of social capital in the private sector, the data available at this point suggest that social capital is more plentiful in the private educational sector.

Reasons Families Apply for Scholarships

School choice advocates say they wish to empower parents by giving them a choice among schools. But critics say that parents, especially poor parents, do not usually have enough information to make intelligent choices, and, when given a choice, academic considerations are not paramount. The Carnegie Foundation for the Advancement of Teaching has claimed that "when parents do select another school, academic concerns often are not central to the decision."[11] But Caroline Hoxby has found that when public schools face greater competition (due to the larger number of school districts within a single metropolitan area), parent involvement in schools increases, student achievement rises, more students attend college, and graduates earn more. [12]

Hoxby's findings may be limited to middle-class families living in suburban areas; it might be quite different for low-income families. A Twentieth Century Fund report claims that low-income parents are not "natural 'consumers' of education. . . [Indeed], few parents of any social class appear willing to acquire the information necessary to make active and informed educational choices."[13] Similarly, an American Federation of Teachers' report on the Cleveland voucher program suggests that parents sought scholarships, not because of "'failing' public schools" but "for religious reasons or because they already had a sibling attending the same school." [14]

To shed light on this debate, families in Washington were asked to state the importance of various reasons for applying for a school-choice scholarship. Not much evidence can be found for the claim that educational considerations are unimportant to low-income families. As can be seen in Table 6, "higher standards" and a "better curriculum" were the reasons most frequently said to be "important" by public-school parents for applying for a scholarship. Over three-fourths of the applicants gave these clearly academic reasons as an important motive for the application. And over half the parents said they were seeking better teachers and smaller schools with smaller class sizes. Nearly half said that an important reason was "safety." One of the least important reasons was the "location" of the school, mentioned by only 16 percent of the public-school applicants.

Parental Satisfaction with Public and Private Schools

Most studies of school choice have found that low-income parents who use vouchers or scholarships to attend private schools are much more satisfied with many different dimensions of their school than are parents whose children remain in public school. Studies of school choice programs in Milwaukee, San Antonio, Indianapolis and Cleveland all reach essentially the same conclusion.[15]

Parental views in Washington were similar (see Table 7). Nearly 60 percent of private-school parents gave their school an "A," as compared to less than a fifth of public-school parents (see Table 6). It might be thought that the lower grade for public than private schools was due to the fact that public-school evaluations were made by applicants for school-choice scholarships. But when parents nationwide were asked in June 1998 to give a grade for the school attended by their oldest child, their responses did not differ significantly from the applicants with children currently in Washington D.C. public schools.[16] The results were as follows:

Grade given School[17]

	Public School Parents (National Survey)	DC Low-Income Applicants from Public School	DC Low-Income Applicants from Private School
A	22 %	18%	59%
B	40	42	30
C	25	31	10
D	8	7	1
F	3	2	0
Don't Know	2		
Total	100%	100%	100%

In other words, applicants from DC public schools do not seem to be a particularly discontented group of public-school parents. Their overall assessments of their children's schools were approximately that of public school parents nationally. Both the parents in the national sample and the DC applicants were much less likely to give their children's school an "A" than were the applicants from DC private schools.

This difference in the degree of satisfaction with public and private schools is evident when you ask about a wide variety of specific aspects of school life (see Table 7). When it comes

to safety, for example, private school applicants are much the more satisfied group of parents. Two-thirds of the private-school parents, but only a quarter of the public-school parents, were "very satisfied" with school safety. Nearly two-thirds of the private-school parents, but less than one-fifth of the public-school parents, were "very satisfied" with their school's academic program. Two-thirds of the private-school parents were "very satisfied" with safety at the school, as compared to less than one-fourth of the parents of students still in public schools.

On a couple of items, transportation and location, the differences between the satisfaction levels of the two groups of parents were not so large. For example, two-thirds of the private school parents were very satisfied with the school's location, but so were half of the public-school parents. But on almost every other item in the questionnaire -- teachers skills, parental involvement, class size, school facility, respect for teachers, teacher and parent relations -- differences in satisfaction levels were large.

School Climate

In their study of public and private schools, John Chubb and Terry Moe find that private schools have more effective educational climates than those prevailing in public schools. [18] They point out that public schools are governed by state laws, federal regulations, school board requirements, and union-contract obligations that impose multiple and not always consistent rules on teachers and principles. Because they must respond to numerous legal and contractual requirements, school administrators and teachers focus more on rule-compliance than on educational mission, undermining the morale of educators whose original objective was to help children learn. The problem, Chubb and Moe say, is particularly prevalent in big city schools.

Private schools, operating with more autonomy, focus more directly on their educational mission and, as a result, achieve a higher degree of internal cohesion. To do otherwise would jeopardize their survival as a fragile institution dependent upon the annual recruitment of new students. As a result, principals and teachers in the private sector enjoy higher morale. Their

interactions with one another and with their students are more positive, and a more effective learning environment is achieved.

Chubb and Moe's findings are based on interviews with teachers and administrators. In this section we examine whether their results are confirmed by reports from Washington parents and students.

Parental Reports

Parents of applicants from private schools say that their school has a much healthier educational climate than do the parents of public-school applicants. As can be seen in Table 8, private school parents are much more likely to "strongly agree" with the following statements about their current school:

- School is safe;
- Teaching is good;
- Teachers help all the students;
- School listens to parents;
- Parents work together to support school;
- Rules for behavior are strict;
- School puts high priority on learning.

Differences between the responses of private and public school applicants ranged between 30 to 40 percentage points; they remained very large even when statistical adjustments were made for the demographic characteristics of the two groups of parents.

Conversely, public school parents were more likely to "strongly agree" with the following statements (see Table 8):

- Discipline is a problem;

- Academic standards are too low;
- Teachers do not assign enough homework.

These parental reports may be skewed by the fact that the applicants from public schools may be applying for a scholarship in order to place their child in a new school, while applicants from private schools are, for the most part, applying for a scholarship so as to keep their child in their current school. Even though the findings remain even after controlling for a variety of demographic characteristics that distinguish the two groups of parents, the two groups of parents remain dissimilar in this important respect. As a result, parental reports of problems in Washington public schools may be exaggerated.

Student Reports

To check the validity of parental reports, students in grades five through eight were also given an opportunity to respond confidentially to questions about the educational climate at their current school. Since most students responded to questions on a Saturday in a setting other than their own school, they had no particular reason to mischaracterize the school's educational climate.

With respect to one item students in the public sector report a more favorable educational climate: Forty-seven percent of the public-school, but only 36 percent of the private-school applicants, say that volunteer work was required by their school.[19] But on numerous other items, students from private schools report the more favorable educational climate. As Table 9 shows in detail, differences in reports of students, almost all of whom were in fifth and sixth grades, were as follows:

- "Strongly agree" that "teachers care about students"--72 percent of private-school students as compared to 55 percent of public-school students.

- "Strongly agree" that "teaching here is good"--68 percent as compared to 52 percent.
- Report "a lot" of cheating at school--8 percent of students in private school as compared to 39 percent of students in pubic school.
- Strongly agree that "some teachers ignore" cheating--13 percent as compared to 25 percent.
- Satisfaction "with the way my education is going"--90 percent of private-school students as compared to 75 percent of public-school students.
- Encouraged "a lot" by teachers to study current events--47 percent as compared to 37 percent.
- "Strongly agree" that "student misbehavior makes it hard to learn"--19 percent as compared to 36 percent.
- Report "there are many gang members in school"--8 percent as compared to 22 percent.
- Report that more of their friends smoke and are members of gangs.
- Report "I do not feel safe at this school"--5 percent as compared to 21 percent.

Of all these reports, the one that is most disturbing involves student safety. It is difficult to imagine children learning up to their ability level if they do not feel safe at school. Apparently, many students in Washington would agree with the Milwaukee girl who made a convincing case for her new choice school: "As soon as I came here it was a big change. Here, teachers care about you....[In public schools] the teachers were too busy to help." Worst of all, she said were the fights: "You really can't avoid it. They'll think you are scared." [20]

Racial and Ethnic Relationships

The effects on students of attending a private school have been a matter of considerable debate. Critics of school choice argue that it will lead to ethnic and racial segregation,[21] while supporters reply that the private sector is more integrated than the public sector. [22]

Students in public and private schools reported similar inter-racial and inter-ethnic experiences in Washington. Where differences were evident, race relationships seemed better in private schools. The proportion of the two groups of applicants reporting inter-racial friendships did not differ significantly; nearly half of both public- and private-school students strongly agreed with the statement , "I have school friends who are not of my race." (See Table 9.) Nor was there any significant difference in the likelihood that different races eat lunch at school together. About half of both groups of students agreed that they do.

The picture is not as sanguine when students are asked about racial conflict. Here private schools had the advantage. Over thirty percent of the applicants from public schools, but only 17 percent of those from private schools said that "fights often occur between racial and ethnic groups."

Conclusions

The WSF program has recruited a more disadvantaged low-income population than has been previously served by the private schools in the District of Columbia. Applicant families coming from public schools are more likely to be of minority background. They are also more likely to be receiving government aid. Mothers and fathers are less likely to have a college education, children are less likely to have married parents, mothers are less likely to attend religious services, and their religious affiliation is less likely to be Catholic.

Applicant families with children in public schools said the most important reasons for applying for a private-school scholarship was to find a school with higher academic standards and a better curriculum. Parents also said they were interested in smaller class sizes and improved safety for their children. Least important was the school's location.

Parental satisfaction with private schools was much higher than with public school. Parents with children in private schools were much more satisfied with every single dimension of

school life, including the academic program, school safety, school discipline, class size, school facilities, and moral instruction.

Private schools are more likely to stimulate the formation of social capital among low-income, inner-city families. Families with children in private schools were more likely than their public-school counterparts to attend school events, talk with other parents about school matters, and feel a part of their community.

Students attending private schools reported better teachers, greater care about students on the part of teachers, less cheating, greater concern among teachers about teaching, higher levels of satisfaction with "the way my education is going," and a greater sense of safety in their school. Parental reports were consistent with student observations.

It appears that low-income families benefit in many ways from placing their children in private schools. But inasmuch as applicants from public and private schools do not constitute a cross-section of the populations attending either the public or private sector, these findings must be regarded as only indicative of possible differences in the two educational sectors. Subsequent reports that include information from a randomized experiment are expected to provide more definitive results.

Table 1 -- Demographic Characteristics of Parents

	Private School Parents[23]	N	Public School Parents[24]	N
Families that receive following forms of gov. assistance	(Percentage)		(Percentage)	
Food stamps	18.9	386	39.7**	1235
Welfare	15.7	376	32.4**	1171
Social Security	8.5	351	11.6	955
Medicaid	16.9	362	35.7**	1109
Supplemental Security Income	4.4	340	9.3**	935
HUD housing vouchers	4.1	339	13.9**	941
Earned Income Tax Credits	43.3	363	43.9	977
Mother's Education	(Percentage)		(Percentage)	
Eighth grade or less	0.7		1.2	
Beyond 8th, less than hs grad	3.3		5.5	
GED	3.3		5.9	
High school graduate	16.6		21.8	
Less than 2 yrs voc school	7.2		11.2	
2 yrs or more voc school	6.5		8.2	
Less than 2 yrs college	24.3		23.2	
2 yrs or more college	19.2		15.0	
College graduate (4 or 5 yr program)	15.4		6.0	
Masters degree or equivalent	2.8		0.9	
PhD, MD or other prof. Degree	0.5		0.4	
Total	100.0		100.0	
Average Years of Education	13.5	428	12.9**	1370
Grade of Child Applying	(Percentage)		(Percentage)	
Kindergarten	19.3		19.9	
1st	19.6		18.0	
2nd	13.0		17.5	
3rd	15.5		12.9	
4th	12.2		12.7	
5th	11.3		11.3	
6th	8.8		7.6	
Older	0.3		0.4	
Total	100.0		100.0	
Average Grade of Child	2.5	430	2.5	1810

Table 1 -- Demographic Characteristics of Parents (Continued)

	Private School Parents	N	Public School Parents	N
Father's Education	(Percentage)		(Percentage)	
Don't Know or Missing	22.1		22.9	
Eighth grade or less	1.1		2.2	
Beyond 8th, less than hs grad	6.3		6.9	
GED	5.6		8.8	
High school graduate	26.6		30.2	
Less than 2 yrs voc school	3.3		4.7	
2 yrs or more voc school	4.7		4.6	
Less than 2 yrs college	9.4		8.5	
2 yrs or more college	11.8		5.7	
College graduate (4 or 5 yr program)	6.5		3.8	
Masters degree or equivalent	2.2		1.3	
PhD, MD or other prof. Degree	0.4		0.3	
Total	100.0		100.0	
Average years of education, if known	12.9	387	12.4**	1269
Mother's Employment Status				
Don't know	1.6		2.1	
Full time	60.2		55.6*	
Part time	15.6		13.0	
Looking for work	16.0		24.3*	
Not looking	6.5		4.9	
Total	100.0	430	100.0	1396
Father's Employment Status				
Don't know	33.7		34.3	
Full time	46.5		42.0	
Part time	6.5		7.3	
Looking for work	8.2		11.2	
Not looking	5.2		5.3	
Total	100.0	368	100.0	1210
Mother's Time at Current Residence, If Known				
Less than 3 months	2.5		3.5	
3-11 months	12.5		13.4	
1-2 years	15.5		19.5	
2+ years	69.5		63.6	
Total	100.0	433	100.0	1407

Table 1 -- Demographic Characteristics of Parents (Continued)

	Private School Parents	N	Public School Parents	N
Father's Time at Current Residence, If Known	(Percentage)		(Percentage)	
Less than 3 months	13.0		13.5	
3-11 months	11.5		11.4	
1-2 years	19.5		20.9	
2+ years	55.7		54.0	
Total	100.0	307	100.0	1007
Mother's Religious Affiliation				
Baptist	39.4		53.2**	
Other Protestant	14.9		15.9	
Catholic	29.8		15.9**	
Other Religion	9.1		6.8	
No Religion	4.0		4.1	
Prefer not to say	2.8		4.1	
Total	100.0	429	100.0	1392
Father's Religious Affiliation				
Baptist	34.4		44.8**	
Other Protestant	11.6		9.2	
Catholic	20.6		14.1	
Other Religion	11.4		9.1	
No Religion	14.6		15.3	
Prefer Not to Say	7.4		7.5	
Total	100.0	349	100.0	1114
Frequency Mother Attends Religious Service				
Never	4.9		8.2**	
Only on major holidays	7.0		7.8	
Once a month	18.3		23.5**	
Once a week	42.9		35.4**	
More than once a week	26.9		24.9	
Total	100.0	427	100.0	1377
Frequency Father Attends Religious Service				
Never	38.4		38.5	
Only on major holidays	16.1		15.3	
Once a month	11.6		16.2	
Once a week	25.2		20.4	
More than once a week	8.4		9.6	
Total	100.0	310	100.0	1015

Table 1 -- Demographic Characteristics of Parents (Continued)

	Private School Parents	N	Public School Parents	N
Mother's Ethnicity	(Percentage)		(Percentage)	
Black	85.6		94.7**	
White	3.2		0.9	
Hispanic	6.8		2.5	
Asian	1.2		0.5	
Other	3.2		1.4	
Total	100.0	432	100.0	1389
Father's Ethnicity				
Black	86.4		93.8**	
White	4.5		0.8**	
Hispanic	4.4		3.0	
Asian	1.3		0.6	
Other	3.4		1.8	
Total	100.0	382	100.0	1264
Mother's Marital Status				
Single, never married	50.6		57.2*	
Married	17.8		13.9	
Divorced or separated	25.5		24.0	
Widowed	5.0		2.8	
Not married, but living with partner	1.1		2.1	
Total	100.0	443	100.0	1414
Male Children Applicants	53.4	556	50.8	2247
Average Number of Children in House	2.1	388	2.6**	1247
Percentage of Mothers US Born	89.0	436	94.6**	1409
Percentage of Fathers US Born	89.6	384	92.9*	1260

Figures many not sum due to rounding.

* = significant at $p < .05$
** = significant at $p < .01$

Table 2 – Parental Involvement at Child's School

	Private School Parents	N	Public School Parents	N
Percent attend most recent parent teacher meeting	86.7	436	83.1	1411
Percent volunteered at school	75.7	442	75.2	1425
Hours volunteered/week	6.6	297	6.5	985
Percent part of PTA/parent organization	43.8	438	40.4	1419
Average number of hours worked for PTA/week	6.0	159	4.7	422
Percent who know all names of child's teachers	91.8	542	88.5*	2174

* = significant at $p < .05$
** = significant at $p < .01$

Table 3 – Child's Educational Characteristics

	Private School Students (percentage)	N	Public School Students (percentage)	N
Child in program for gifted or talented students	24.0	443	21.0	1418
Children who received special award in school	67.5	442	72.4*	1416
Which of the following educational challenges does child face:				
Does not learn quickly	11.9	566	18.9**	2278
Physical disability	1.9	566	1.3	2278
Behavior problems	4.2	566	8.2**	2278
Often bored in class	25.5	566	32.4**	2278
Selectively interested in subjects	16.6	566	23.3**	2278
Does not understand English well	0.4	566	1.1	2278
Learning disability	3.4	566	4.6	2278
Discipline problems	1.2	566	4.0**	2278
Does not have many friends	5.7	566	8.2*	2278
Does not do schoolwork enough	0.9	566	7.0*	2278
No special challenges	39.5	566	31.3**	2278

* = significant at $p < .05$
** = significant at $p < .01$

Table 4 -- Parental Involvement with Child

	Private School Parents	N	Public School Parents	N
Participated in following activities w/ child: [25]				
Attended school activities w/ child	3.6	423	3.3**	1383
Work on homework	3.9	431	3.8	1396
Attend religious services	3.5	427	3.3*	1384
Attend concert or movie	3.5	430	3.4	1399
Go shopping	3.4	426	3.5*	1394
Eat out at restaurant	3.3	428	3.4	1397
Spend time just talking	3.8	431	3.8	1406
Child signed up for after school program	(Percentage) 39.2	557	(Percentage) 50.0**	2243
Child takes music lessons	(Percentage) 29.8	554	(Percentage) 22.6**	2234

* = significant at $p < .05$
** = significant at $p < .01$

Table 5 – Parents' Social Capital and Civic Values

	Private School Parents (percentage)	N	Public School Parents (percentage)	N
How often discuss school affairs with other parents				
Seldom or never	16.6		31.3**#	
Once or twice a month	30.5		24.4	
Once or twice a week	30.3		25.1	
Almost every day	22.6		19.2	
Total	100.0	431	100.0	1387
Do you feel part of community or is this just a place to live?				
Part of the community	73.8		63.2**#	
Place to live	26.2		36.8	
Total	100.0	437	100.0	1401
Safety rate of neighborhood				
Very safe	21.7		14.1**#	
Somewhat safe	58.2		54.9	
Somewhat unsafe	15.8		21.7	
Very unsafe	4.3		9.3	
Total	100.0	440	100.0	1404
Parent knows parents of child's 1st friend	87.8	524	82.8**#	2000
Parent knows parents of child's 2nd friend	85.8	480	75.5**#	1751
Parent knows parents of child's 3rd friend	82.9	422	76.4**#	1413

Figures may not sum due to rounding.

* = significant at $p < .05$
** = significant at $p < .01$
# = difference remains significant after controlling for whether family moved for a better school, educational expectations for child, marital status, mother's education, African-American mothers, non-native born mothers, residential mobility, mother's employment status, dependence on any government assistance, size of household, and Catholic mothers.

Table 6 – Reasons for Applying for Voucher

	Private School Parents (percentage)	N	Public School Parents (percentage)	N
Parents reporting following as "Important"				
Higher standards	47.7	449	79.7**	1441
Better curriculum	44.1	449	78.4**	1441
Smaller class size	30.4	449	58.4**	1441
Better teachers	36.7	449	55.2**	1441
Safer school	33.3	449	45.5**	1441
More parent involvement	32.0	449	43.8**	1441
Child's special needs not currently addressed	10.1	449	34.4**	1441
Child doing badly in current school	4.7	449	20.9**	1441
Location of school	9.4	449	15.8**	1441
Want to keep child in current school	67.6	449	4.1**	1441

* = significant at $p < .05$
** = significant at $p < .01$

Table 7 – Parental Satisfaction with Current School

	Private School Parents (percentage)	N	Public School Parents (percentage)	N
Parents 'very satisfied' with:				
Moral Values	69.7	424	20.9**#	1342
School Discipline	64.3	427	20.2**#	1350
Academic Program	62.5	420	19.7**#	1317
Safety	66.3	425	24.9**#	1354
Teacher Skills	63.8	421	23.9**#	1347
Class Size	53.8	423	14.5**#	1324
Respect for Teachers	63.2	425	27.9**#	1335
Parental Involvement	66.6	420	38.0**#	1340
School Facility	48.2	420	15.2**#	1318
Teacher-Parent Relations	66.3	425	34.5**#	1338
Transportation	50.9	402	28.7**#	1235
Location	66.8	423	46.5**#	1360
Grade parent would give on how well each of their children is taught:				
A	58.6		18.2**#	
B	30.5		41.5**#	
C	9.9		31.2**#	
D	1.1		7.3**#	
F	0.0		1.8	
Total	100.0		100.0	
Average grade parents give school	A-	548	B-**#	2222

Figures may not sum due to rounding.

* = significant at $p < .05$
** = significant at $p < .01$
# = difference remains significant after controlling for whether family moved for a better school, educational expectations for child, marital status, mother's education, African-American mothers, non-native born mothers, residential mobility, mother's employment status, dependence on any government assistance, size of household, and Catholic mothers.

Table 8 – Parental Views of Current School

	Private School Parents (percentage)	N	Public School Parents (percentage)	N
Parents who "strongly agree" that current school has following characteristics:				
Puts high priority on learning	68.5	436	21.3**#	1371
School is safe	55.8	431	14.3**#	1361
Teaching is good	56.7	428	14.1**#	1344
Teachers help all the students	53.7	429	11.4**#	1356
Parents work together to support school	45.9	428	12.7**#	1348
Rules for behavior are strict	39.2	427	11.3**#	1352
School listens to parents	36.8	425	9.5**#	1316
Discipline is a problem	9.6	426	25.7**#	1358
Academic standards too low	6.0	419	15.7**#	1347
Teachers do not assign enough homework	6.0	419	14.4**#	1331
Teachers assign too much homework	6.3	427	5.6	1368

* = significant at $p < .05$
** = significant at $p < .01$
# = difference remains significant after controlling for whether family moved for a better school, educational expectations for child, marital status, mother's education, African-American mothers, non-native born mothers, residential mobility, mother's employment status, dependence on any government assistance, size of household, and Catholic mothers.

Table 9 – Students' Views of Current School

	Private School Students (percentage)	N	Public School Students (percentage)	N
Satisfied with way education is going	88.1	178	74.8**#	671
Students who do not feel safe at school	5.2	174	20.6**#	654
Have classes that require current events	68.6	174	77.3	656
Encouraged by teachers to follow current events:				
None	9.2		14.2*	
Some	44.3		48.5	
A lot	46.6		37.2*	
Total	100.0	175	100.0	692
Strongly agree with following:				
There is real school spirit here	50.3	168	42.4*	664
I have friends not of my race	41.1	169	42.2	654
Different races eat lunch together	50.0	165	50.2	659
The teaching is good here	65.7	167	51.7**#	658
Teachers care about students	71.9	168	55.0**#	644
Student misbehavior makes it hard to learn	19.4	166	36.0**#	643
Agree or strongly agree with following:				
Racial fights often occur	17.0	166	30.9**#	647
Many gangs in school	10.3	166	22.2**#	639
There is a lot of cheating	21.9	170	40.7**#	646
Some teachers ignore cheating	13.1	169	24.9**#	649
Friends engage in the following activities:				
Smoke every day or so	2.3	133	9.3**#	500
Drink every day or so	0.8	133	3.8*	500
Belong to a gang	0.8	134	7.6**#	500
Use drugs every week or so	0.8	132	4.6*	501

Figures may not sum due to rounding.

* = significant at $p < .05$
** = significant at $p < .01$
# = difference remains significant after controlling for whether family moved for a better school, educational expectations for child, marital status, mother's education, African-American mothers, non-native born mothers, residential mobility, mother's employment status, dependence on any government assistance, size of household, and Catholic mothers, student's gender, and student's grade.

Appendix Table – Comparison of Voucher Recipients and Non-Recipients

	Private School Parents			Public School Parents		
	Voucher Recipients (percentage)	Non-Recipients (percentage)	N	Voucher Recipients (percentage)	Non-Recipients (percentage)	N
Families that receive following forms of gov. assistance:						
Food stamps	18.1	19.9	386	38.5	40.8	1235
Welfare	15.9	15.5	376	30.3	34.3	1171
Social Security	7.3	10.1	351	12.5	10.7	955
Medicaid	15.2	18.8	362	33.7	37.7	1109
Supplemental Security Income	4.3	4.6	340	8.2	10.4	935
HUD housing vouchers	4.3	4.0	339	12.8	15.0	941
Earned Income Tax Credits	41.1	45.8	363	41.9	45.8	977
Mother's Education						
Eighth grade or less	1.5	0.0		0.7	1.7	
Beyond 8th, less than hs grad	3.5	3.1		4.8	6.2	
GED	2.0	4.4		6.2	5.6	
High school graduate	18.4	15.0		22.1	21.4	
Less than 2 yrs voc school	9.5	5.3		13.5	8.5	
2 yrs or more voc school	6.5	6.6		9.4	7.0	
Less than 2 yrs college	27.9	21.1		22.4	24.1	
2 yrs or more college	15.9	22.0		14.5	15.6	
College grad. (4/5 yr prog.)	11.9	18.5		5.1	7.0	
Masters degree or equivalent	2.5	3.1		0.4	1.4	
PhD, MD, other prof. Degree	0.5	0.4		0.4	0.5	
Total	100.0	100.0	428	100.0	100.0	1370
Father's Education						
Don't Know or Missing	8.9	9.6		11.3	13.4	
Eighth grade or less	1.7	1.0		2.4	2.6	
Beyond 8th, less than hs grad	6.1	8.2		8.2	7.5	
GED	7.8	5.3		10.5	9.4	
High school graduate	32.4	29.3		35.9	32.4	
Less than 2 yrs voc school	3.9	3.8		6.6	3.9	
2 yrs or more voc school	6.1	4.8		4.9	5.5	
Less than 2 yrs college	10.1	11.5		7.6	11.9	
2 yrs or more college	12.8	14.4		7.0	5.9	
College grad. (4/5 yr prog.)	7.3	7.7		3.4	5.4	
Masters degree or equivalent	2.8	2.4		1.8	1.1	
PhD, MD, other prof. Degree	0.0	1.0		0.2	0.5	
Total	100.0	100.0	387	100.0	100.0	1269

Appendix Table Continued

	Private School Parents			Public School Parents		
	Voucher Recipients (percentage)	Non-Recipients (percentage)	N	Voucher Recipients (percentage)	Non-Recipients (percentage)	N
Mother's Employment Status						
Don't know	0.5	2.6		1.8	2.5	
Full time	64.5	56.7		54.8	56.5	
Part time	16.2	15.0		13.4	12.5	
Looking for work	14.2	17.6		24.9	23.6	
Not looking	4.6	8.2		5.0	4.8	
Total	100.0	100.0	430	100.0	100.0	1396
Father's Employment Status						
Don't know	39.0	29.1		34.0	34.6	
Full time	41.9	50.5		41.7	42.2	
Part time	4.1	8.7		6.3	8.3	
Looking for work	9.9	6.6		10.5	11.8	
Not looking	5.2	5.1		7.4	3.0	
Total	100.0	100.0	368	100.0	100.0	1210
Mother's Time at Current Residence, If Known						
Less than 3 months	1.0	3.9		3.3	3.7	
3-11 months	13.9	11.2		13.0	13.9	
1-2 years	13.4	17.2		21.2	17.7	
2+ years	71.6	67.7		62.5	64.8	
Total	100.0	100.0	433	100.0	100.1	1407
Father's Time at Current Residence, If Known						
Less than 3 months	15.5	10.9		15.1	11.9	
3-11 months	14.8	8.5		11.9	11.1	
1-2 years	16.9	21.8		21.7	20.0	
2+ years	52.8	58.2		51.3	56.9	
Total	100.0	100.0	307	100.0	100.0	1007
Mother's Religious Affiliation						
Baptist	42.9	36.4		54.0	52.3	
Other Protestant	12.7	15.9		16.9	14.7	
Catholic	32.8	27.3		15.6	16.3	
Other Religion	7.1	11.8		5.1	8.8	
No Religion	3.5	4.3		4.6	3.5	
Prefer not to say	1.0	4.3		3.8	4.4	
Total	100.0	100.0	429	100.0	100.0	1392

Appendix Table Continued

	Private School Parents			Public School Parents		
	Voucher Recipients (percentage)	Non-Recipients (percentage)	N	Voucher Recipients (percentage)	Non-Recipients (percentage)	N
Father's Religious Affiliation						
Baptist	38.7	30.6		46.2	43.4	
Other Protestant	12.3	10.1		7.6	9.5	
Catholic	23.3	18.3		13.8	14.4	
Other Religion	5.5	17.3		9.0	10.5	
No Religion	13.5	15.6		17.2	13.3	
Prefer Not to Say	6.7	8.1		6.2	8.9	
Total	100.0	100.0	349	100.0	100.0	1114
Frequency Mother Attends Religious Service						
Never	4.6	5.2		8.8	7.6	
Only on major holidays	6.6	7.4		7.9	7.8	
Once a month	21.4	15.6		24.4	22.6	
Once a week	40.8	44.6		33.3	37.5	
More than once a week	26.5	27.3		25.4	24.4	
Total	100.0	100.0	427	100.0	100.0	1377
Frequency Father Attends Religious Service						
Never	42.4	34.9		40.8	36.0	
Only on major holidays	18.1	14.5		16.4	14.1	
Once a month	10.4	12.7		15.4	17.0	
Once a week	23.5	26.5		19.5	21.3	
More than once a week	5.6	10.8		7.7	11.6	
Total	100.0	100.0	310	100.0	100.0	1015
Mother's Ethnicity						
Black	84.1	87.0		94.8	94.7	
White	2.5	3.9		0.8	0.9	
Hispanic	8.0	5.6		2.5	2.4	
Asian	1.5	0.9		0.4	0.6	
Other	4.0	2.6		1.4	1.2	
Total	100.0	100.0	432	100.0	100.0	1389
Father's Ethnicity						
Black	87.1	85.8		94.0	93.7	
White	4.1	4.7		1.1	0.5	
Hispanic	5.3	3.8		2.9	3.1	
Asian	1.2	1.4		0.5	0.6	
Other	2.3	4.3		1.6	2.2	
Total	100.0	100.0	382	100.0	100.0	1264

Appendix Table Continued

	Private School Parents			Public School Parents		
	Voucher Recipients (percentage)	Non-Recipients (percentage)	N	Voucher Recipients (percentage)	Non-Recipients (percentage)	N
Mother's Marital Status						
Single, never married	47.1	53.6		57.4	57.0	
Married	17.6	18.0		11.8	16.0	
Divorced or separated	29.9	21.8		24.8	23.1	
Widowed	4.4	5.4		2.6	2.9	
Not married, living w/ partner	1.0	1.3		3.0	1.0	
Total	100.0	100.0	443	100.0	100.0	1414
Ave. Num. Children in House	2.1	2.1	388	2.7	2.4*	1247
Mother is US Born	87.0	90.7	436	95.0	94.2	1409
Father is US Born	90.2	89.0	384	92.7	93.0	1260
Male Children Applicants	57.9	49.5*	556	51.0	50.7	2247
Grade of Child Applying						
Kindergarten	18.6	20.0		20.8	19.0	
1st	19.2	20.0		19.2	16.7	
2nd	11.4	14.4		15.8	19.2	
3rd	16.2	14.9		12.7	13.2	
4th	12.0	12.3		11.9	13.7	
5th	11.4	11.3		11.5	10.5	
6th	10.8	7.2		7.8	7.5	
Older	0.6	0.0		0.3	0.2	
Total	100.0	100.0	362	100.0	100.0	1625

Figures may not sum due to rounding.

* = significant at $p < .05$
** = significant at $p < .01$

Endnotes

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[2] Sandra Feldman, "Let's Tell the Truth," *New York Times*, November 2, 1997, p. 7 (Advertisement).

[3] Paul E. Peterson, David Myers, Josh Haimson, and William G. Howell, "Initial Findings from the Evaluation of the New York School Choice Scholarships Program," Occasional Paper, Program on Education Policy and Governance, Taubman Center on State and Local Government, Kennedy School of Government, Harvard University, Cambridge, MA, November 1997; Jay P. Greene, William G. Howell, and Paul E. Peterson, "Lessons from the Cleveland Scholarship Program," in Paul E. Peterson and Bryan C. Hassel., eds., *Learning from School Choice* (Washington, D. C.: Brookings,1998), pp. 357-94.

[4] This statistical analysis is a regression analysis that regresses the dependent variable on the type of school the child attended and the following demographic characteristics: ethnicity, mother married, mother non-native, length of time at same residence, mother employed full time, years of mother's education, receipt of any one of several government benefits (food stamps, welfare, medicaid, social security, housing, etc.), mother Catholic, number of children under 18 in the house, family moved to find a better school, and educational expectations for the child.

These data are unable to determine whether the applicant population was more or less disadvantaged than a cross section of the total population eligible to participate. A similarly designed scholarship program in New York City recruited applicants whose income was similarly to the eligible population but who were more likely to be of a minority ethnic background and in which mothers were more likely to have a college education. Rachael Dayette, "How Selected are Applicants for School-choice Scholarship Programs?" (Program on Education Policy and Governance, Kennedy School of Government, Harvard University, 1998).

[5] Exaggerated assessments are particularly probable in a context where parents are filling out questionnaires in conjunction with applications for an educational scholarship. Even though families were told their answers to questions would have no effect on their chances of winning a scholarship, parents may have elected not to take any risks. Also, parent perception of their own educational commitment and involvement may have been exaggerated by the specific circumstances under which they were answering these questions. Anyone who is devoting a Saturday to applying for a scholarship for their child is likely to perceive their own educational involvement to be quite substantial.

[6] James S. Coleman, Thomas Hoffer and Sally Kilgore, *High School Achievement: Public, Catholic and Private Schools Compared* (New York: Basic Books, 1982; James S. Coleman and Thomas Hoffer, *Public and Private High Schools: The Impact of Communities* (New York: Basic Books, 1987).

[7] Anthony S. Bryk, Valerie E. Lee, and Peter B. Holland, *Catholic Schools and the Common Good* (Harvard University Press, 1993).

[8] Robert Putnam,. "The Prosperous Community: Social Capital and Public Life," *American Prospect*, 13: 1993, pp. 35-42; Robert Putnam, "Bowling Alone: Democracy in America at Century's End," Alex Hadenius, ed.,

Democracy's Victory and Crisis (New York: Cambridge University Press, 1997), pp. 27-70. For commentary and criticism of Putnam's thesis, see the symposium in The *American Prospect*, March-April, 1996: 17-28; Michael Schudson, "What if Civic Life Didn't Die?" 17-20; Theda Skocpol, "Unraveling From Above," 20-25; Robert D. Putnam, "Robert Putnam Responds," 26-28; Richard M. Valelly, "Couch-Potato Democracy?" 25-26; Robert D. Putnam, "Robert Putnam Responds," 26-28.

[9] Amy Gutmann, *Democratic Education* (Princeton University Press, 1987), p. 70.

[10] In Mark Schneider, Paul Teske, Melissa Marschall, Michael Mintrom and Christine Roch, "Institutional Arrangements and the Creation of Social Capital: The Effects of School choice," American Political Science Review 91 (1977): 82-93, the authors find that, within the public sector, social capital increases when school choice programs are established.

[11] Carnegie Foundation for the Advancement of Teaching, School Choice: A Special Report Princeton, New Jersey: Carnegie Foundation for the advancement of Teaching, 1992), p. 13.

[12] Caroline M. Hoxby, "Analyzing School Choice Reforms Using America's Traditional Forms of Parental Choice, in Peterson and Hassel, p. 144.

[13] Carol Ascher, Norm Fruchter, and Robert Berne, Hard Lessons: Public Schools and Privatization (New York: Twentieth Century Fund Press, 1996), pp. 40-41.

[14] Dan Murphy, F. Howard Nelson and Bella Rosenberg, "The Cleveland Voucher Program: Who Chooses? Who Gets Chosen? Who Pays?," (New York: American Federation of Teachers, 1997), p. 10.

[15] These results are summarized in Paul E. Peterson, "School Choice: A Report Card," in Peterson and Hassel, eds., *Learning from School Choice*, pp. 17-19.

[16] Lowell C. Rose and Alec M. Gallup, "the 30th Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes toward the Public Schools," http://www.kiva.net/-pdkintl/kappan/kp9809-1.htm

[17] Gallup question: "Using the A, B, C, D, Fail scale again, what grade would you give the school your oldest child attends? District of Columbia question: what is the grade you would give on how well this child is taught? Response categories are A, B, C, D, F.

[18] John E. Chubb and Terry M. Moe, *Politics, Markets and America's Schools* (Washington, D. C.: Brookings Institution Press, 1990).

[19] Not shown in tables.

[20] Carenegie Endowment for the Advancement of Teaching, p. 69.

[21] Michael Kelly, "Dangerous Minds," *New Republic*, December 30, 1996: Amy Gunman, *Democratic Education*; Karl E. Taeuber and David R. James, "Racial Segregation among Public and Private Schools," *Sociology of Education* 55 (April/July 1982), pp. 103-22.

[22] Jay P. Greene, "Civic Values in public and Private Schools," in Peterson and Hassel, eds. *Learning from School Choice*, pp. 83-106.

[23] These are parents applying for a voucher whose children are currently in private school.

[24] These are parents applying for a voucher whose children are currently in public school.

[25] The scale for these items was:
1=hardly ever,
2= once in a while,
3 =pretty often, and
4 =very often